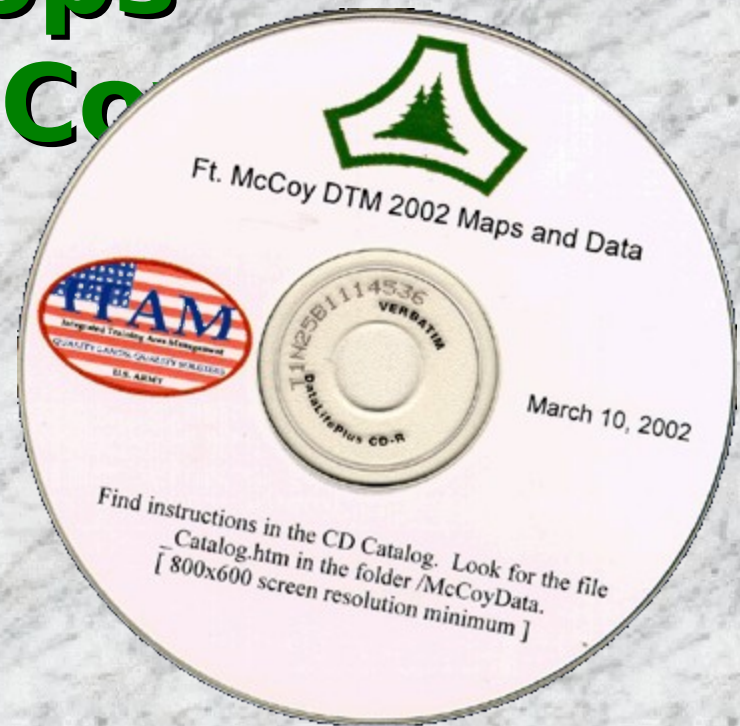




FORT MCCOY



Empowering Troops With the Fort McCoy Maps & Data CD



By David Aslesen, ITAM GIS Analyst
11th Annual ITAM Workshop, Ft. Steward,
GA

August 2002



F O R T M C C O Y



What's In This For You?

- ▮ Perspective On Mapping Trends**

- ▮ Ideas To Implement At Your Installation**



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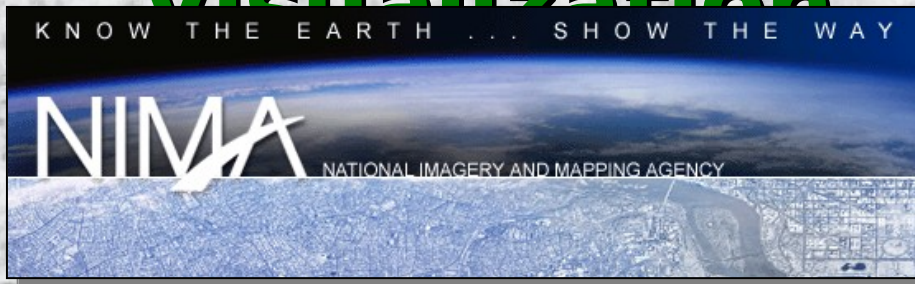
- 1. Compare With Other Projects**
- 2. Share User Survey Results**
- 3. Look Toward Future**
- 4. Demonstrate Structure & Content**



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Military Terrain Visualization



Fort Leonard Wood





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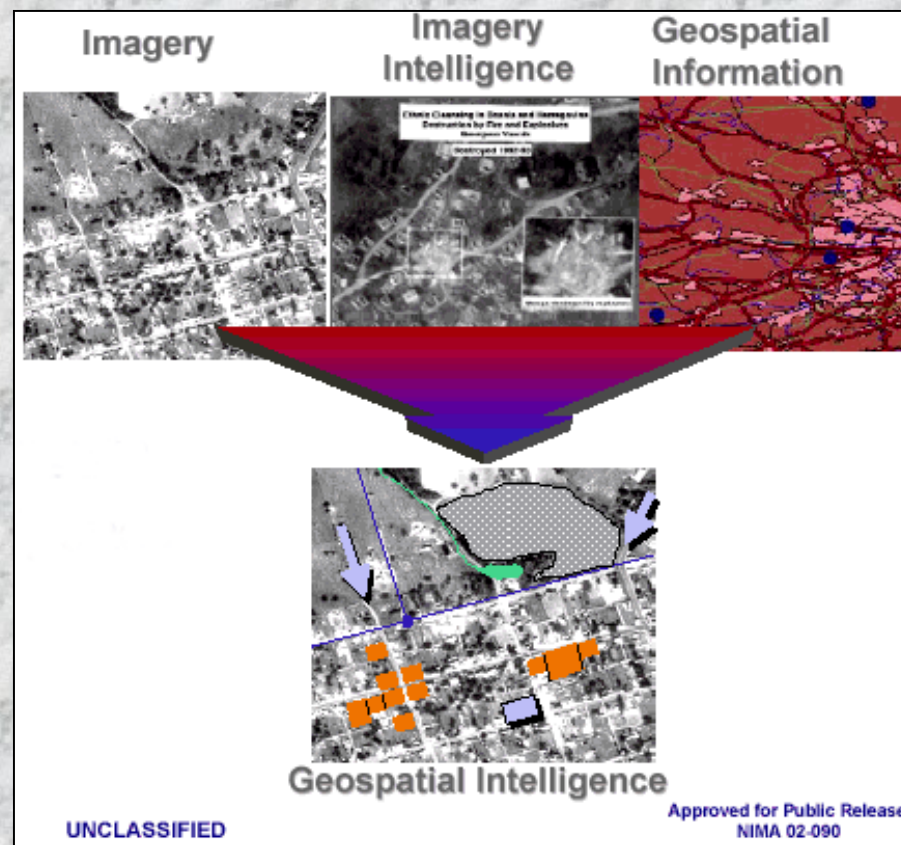


National Geospatial Intelligence School



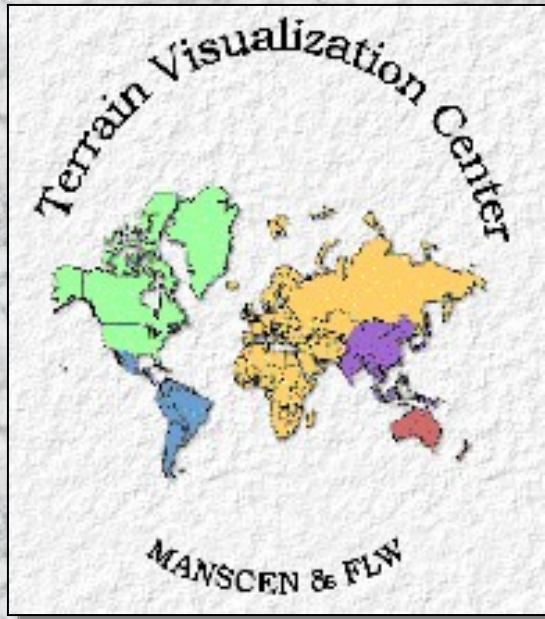
www.nima.mil

- * **Edge Viewer**
 - * **Nimause**
 - * **FalconView**
- AirForce / Navy**





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www.wood.army.mil/TVC/

- * **MicroDEM**
- * **Terra Base**
- II**



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www.tec.army.mil

VTP

welcome to the
Virtual Terrain Project

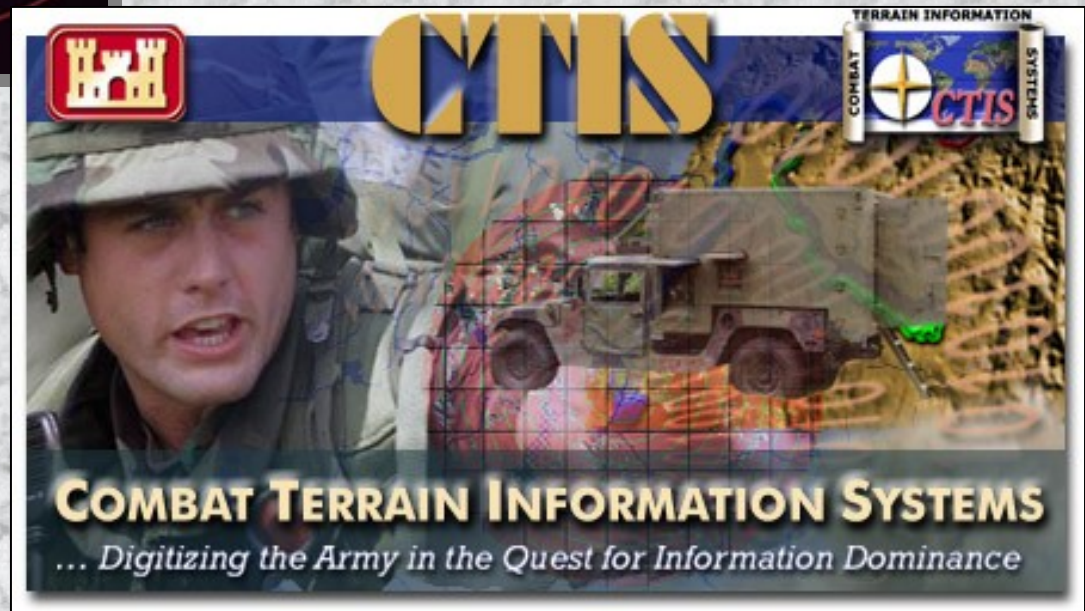




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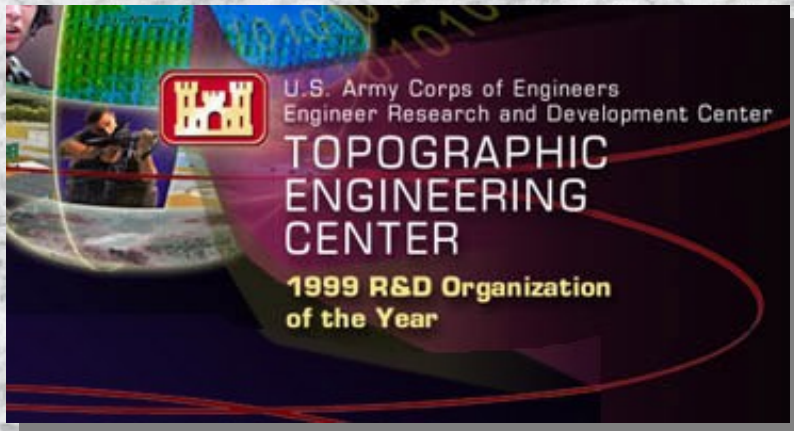


www.tec.army.mil





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Corps and Division Terrain Teams

[***www.tec.army.mil***](http://www.tec.army.mil)

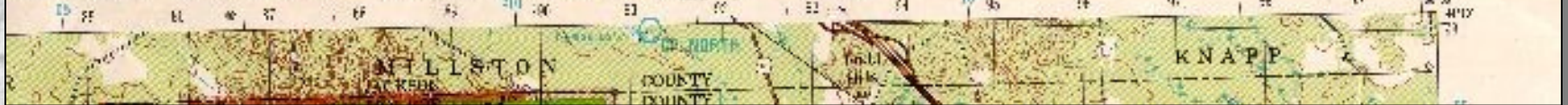




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McCOY MILITARY INSTALLATION MAP



Installation Special

Prepared by the 100th Engineer Company
30th Engineer Battalion (Topo) (Army)
20th Engineer Brigade (CBT) (ABN)
Fort Bragg, North Carolina 28307-5000
May 1998





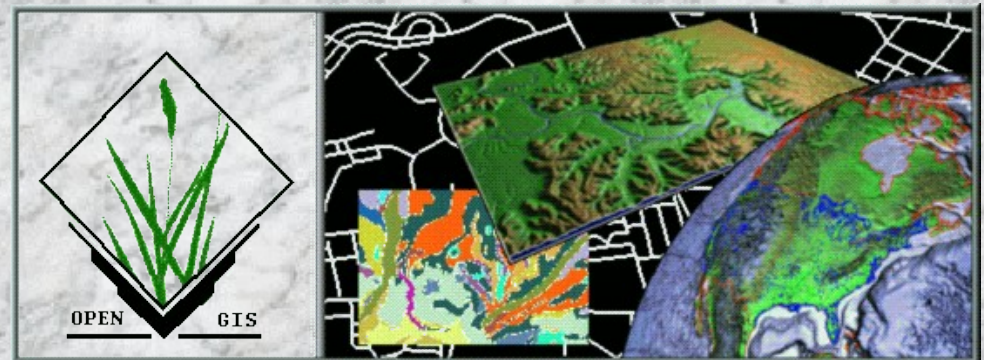
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ITAM Terrain Visualization:

- GRASS GIS (early 1990's - USACE Sponsored)

Single Operator, poor cartography





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ITAM Terrain Visualization:

- **GRASS GIS (early 1990's - USACE**

Sponsored)

- **GRASS GIS (1990's - 2000's - USACE)**

Expanded use by more staff

**Better cartography - hardcopy MIM
production**



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ITAM Terrain Visualization:

- **GRASS GIS (early 1990's - USACE Sponsored)**
- **COTS GIS (mid 1990's - mostly ESRI)**
- **Customized Desktop GIS for military trainers**
Not widely used at other installations:
 - **Limited user access (dedicated computer)**
 - **Expensive (dedicated Arcview license)**
 - **Difficult to set-up**



F O R T M C C O Y



ITAM Terrain Visualization:

- **GRASS GIS (early 1990's - USACE Sponsored)**
- **COTS GIS (mid 1990's - mostly ESRI)**
- **MAGIC 1.0 (1997-98 - Arcview Project)**
- **Affordable CD writers, excellent image compression**
Easier to distribute
Static views, no query



F O R T M C C O Y



ITAM Terrain Visualization:

- **GRASS GIS (early 1990's - USACE Sponsored)**
- **COTS GIS (mid 1990's - mostly ESRI)**
- **MAGIC 1.0 (1997-98 - Arcview Project)**
- **Digital Maps (late 1990's - Free Viewers)**
- **Free Viewer - easily distributed on CD**
 - More interactive - separate themes, symbols, query**
 - ArcExplorer not customizable**
 - Army Atlas for AEC (example)***



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ITAM Terrain Visualization:

- **GRASS GIS (early 1990's - USACE**

Sponsored)

- **COTS GIS (mid 1990's - mostly ESRI)**
- **MAGIC 1.0 (1997-98 - Arcview Project)**
- **Digital Maps (late 1990's - Free Viewers)**
- **MAGIC 2.0 (ArcExplorer Projects)**

- **Easily distributed on CD**

speci Most focused customization

Moderate initial development cost



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ITAM Terrain Visualization:

- GRASS GIS (early 1990's - USACE

Sponsored)

- COTS GIS (mid 1990's - USACE)
- MAGIC (mid 1990's - USACE)
- Digital Map (mid 1990's - Free Viewers)

- MAGIC 2.0 (ArcExplorer Projects)

- *ITAM Viewer* - Customized MrSID Viewer (Hawaii)

speci

GISMO / SMOTE - Map Objects (Hunter Liggett / Alaska)

ITAM - Map Objects (Duck Lake / BTR)



F O R T M C C O Y



ITAM Terrain Visualization:

- **GRASS GIS (early 1990's - USACE**

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- **COTS GIS (mid 1990's - mostly ESRI)**
- **MAGIC 1.0 (1997-98 - Arcview Project)**
- **Digital Maps (late 1990's - Free Viewers)**
- **MAGIC 2.0 (ArcExplorer Projects)**
- **Customized Viewers (installation**

speci

- **Easiest / cheapest to distribute, highly customizable**

Web access required, performance may be

g)



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ITAM Terrain Visualization:

- GRASS GIS
- COTS GIS
- MAGIC 1.0
- Digital Maps
- MAGIC 2.0
- Customized Viewer
- MAGIC 3.0

Map Quality
Map "Current-ness"
Amount of info
of direct users
of usable locations
Flexibility
Perspectives
Empowerment

G
e
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F O R T M C C O Y



Fort McCoy Maps & Data CD:

- **GRASS GIS**
- **COTS GIS**
- **MAGIC 1.0**
- **Digital Maps**
- **MAGIC 2.0**
- **Customized Viewers**
- **MAGIC 3.0**



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Fort McCoy Maps & Data CD:

- 1. Diverse - Not Just A Viewer**
- MrSID Maps

MrSID Format - Basemap + Theme



- 9 Maps / 2 Photos

Contents

What's New

CD Installation

Viewing Maps

Printing Maps

GIS Data Viewer

Military Symbols

Videos



F O R T M C C O Y

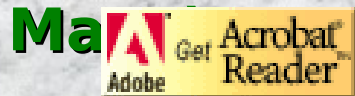


Fort McCoy Maps & Data CD:

1. Diverse - Not Just A Viewer

- MrSID Maps
- Acrobat Maps

Acrobat Format - Basemap + Theme (6



- Facilities, etc (6 Maps)

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Fort McCoy Maps & Data CD:

1. Diverse - Not Just A Viewer

- MrSID Maps
- Acrobat Maps
- PowerPoint Maps

PowerPoint Presentations - MPFTS 1 & 2
- Often
Requested

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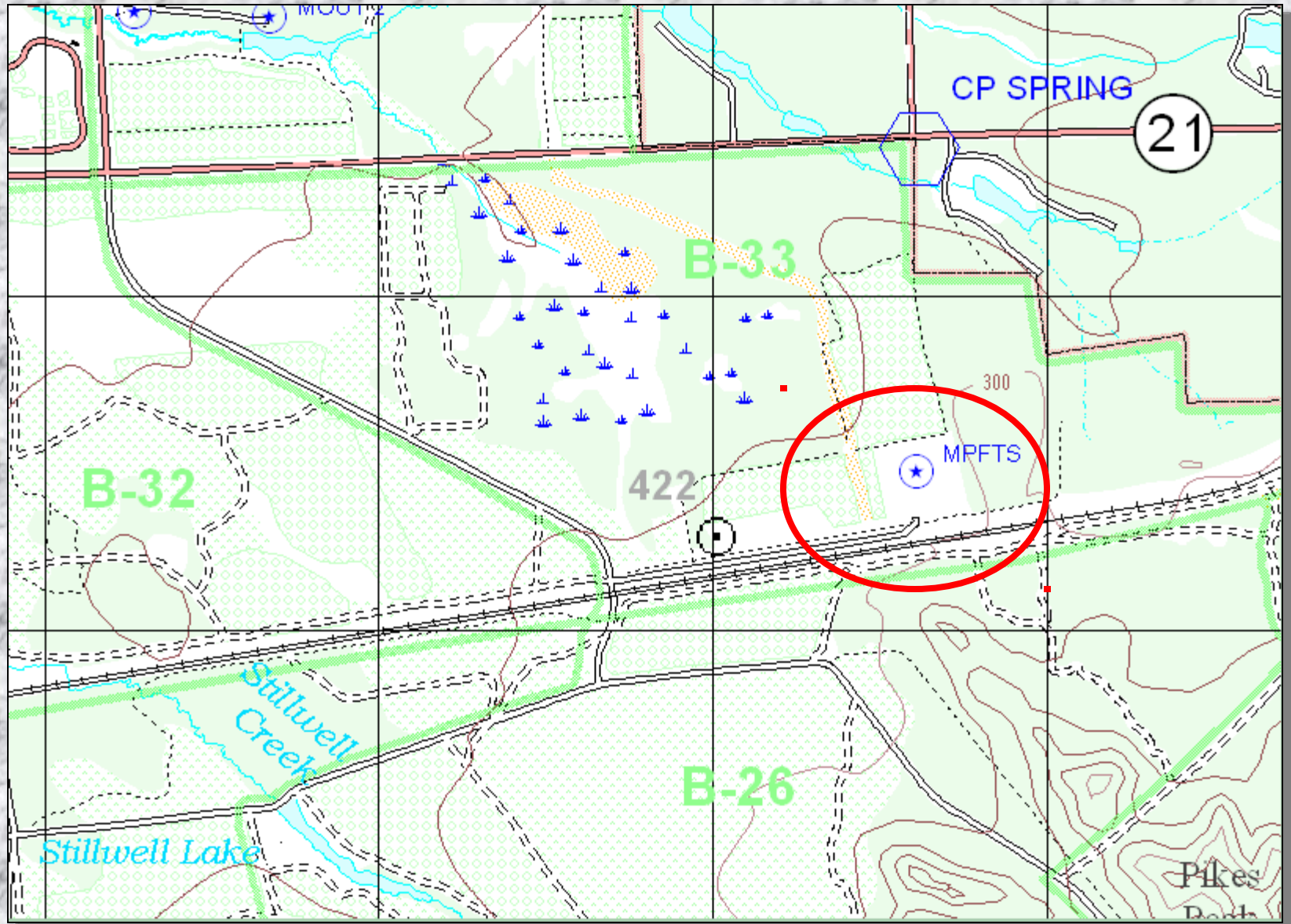
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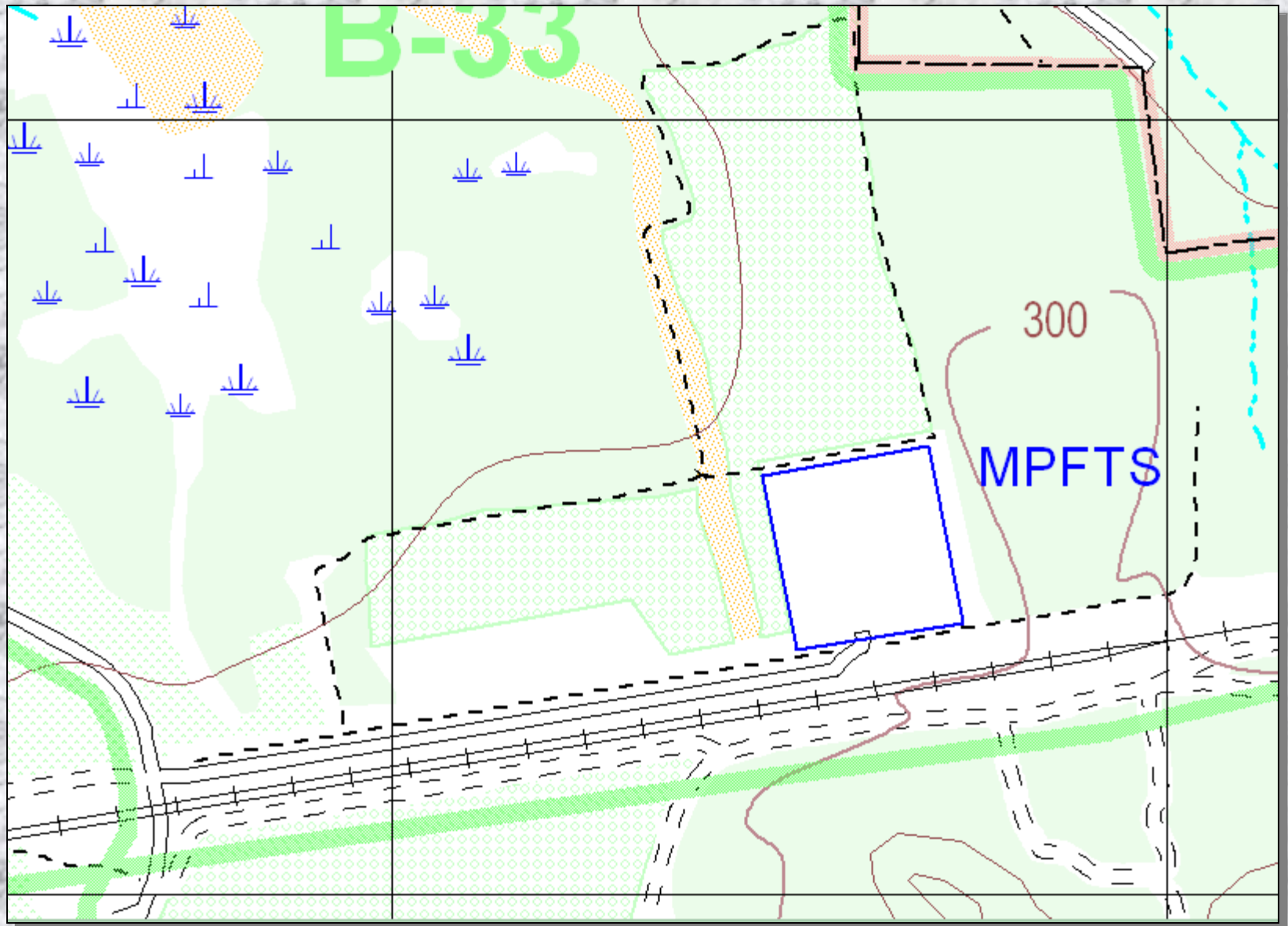
MPFTS - Overview Map



MPFITS - Overview Photo (Fall 2000)



MPFITS - Close-up Map



MPFTS - Close-up Photo (Fall 2000)



Clearing for new road in red.

MPFITS - Close-up Photo (Fall 2000)



Clearing for new road in red.



F O R T M C C O Y



Fort McCoy Maps & Data CD:

1. Diverse - Not Just A Viewer

- MrSID Maps
- Acrobat Maps
- PowerPoint Maps
- Plotter Files for Maps

Large Format Plotter Files - .rtl format
(HP Designjet)
common

maps

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Fort McCoy Maps & Data CD:

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- MrSID Maps
- Acrobat Maps
- PowerPoint Maps
- Plotter Files for Maps
- ArcExplorer Projects
- Extra GIS Data Layers

**ArcExplorer Projects - Installation /
Cantonment Area**

Extra GIS Data Layers

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MrSid Viewer

Acrobat Viewer

**ArcExplorer
Viewer**

Installation Tips

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- Military Symbol Fonts

Eight True Type Font Sets

Symbol Font Index

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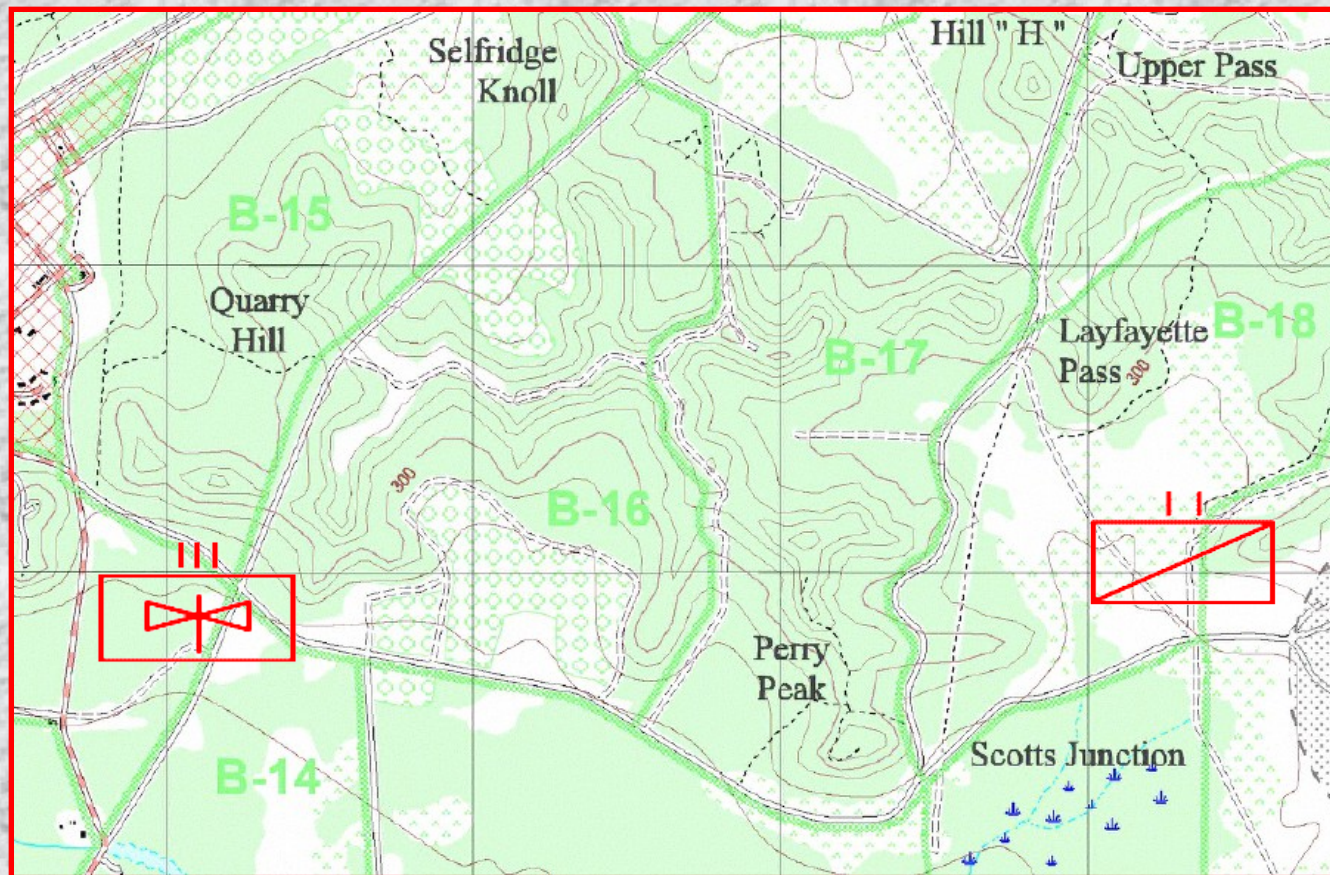
Videos



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Fort McCoy Maps & Data CD:

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- Video Files

Real Player Format - Range Safety Video

- Range Marketing

Video

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Fort McCoy Maps & Data CD:

1. **Diverse - Not Just A Viewer**
2. **CD Catalogue For Exploration**
 - HTML Based -- Another Free Viewer!

Ft McCoy DTM Geospatial Data Catalogue

Maps And Data CD [Version March 2002]
Integrated Training Area Management Program (TTAM) [[Contact](#)]

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F O R T M C C O Y



Fort McCoy Maps & Data CD:

1. **Diverse - Not Just A Viewer**
 2. **CD Catalogue For Exploration**
 3. **Disadvantages**
 - **Maps Static**
 - **Viewers Limited**
- Free**
 - **Access Limited**
- Content**
 - **Distribution Costs**
- than WWW**
- Maps**
- Requests**
- Advantages**
 - **Simpler to use**
 - **Viewers**
 - **More**
 - **Faster**
 - **High Quality**
 - **Fewer Map**

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Fort McCoy Maps & Data CD:

1. **Diverse - Not Just A Viewer**
2. **CD Catalogue For Exploration**
3. **Disadvantages -- Advantages**

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User Survey Results

*** 10 out of 51 survey forms completed - 20%**

5 Regular Ft. McCoy User

2 Occasional Ft. McCoy User

1 Considering Ft. McCoy

1 Installation Staff

1 Not Customer (Did not use the CD)

10 Total

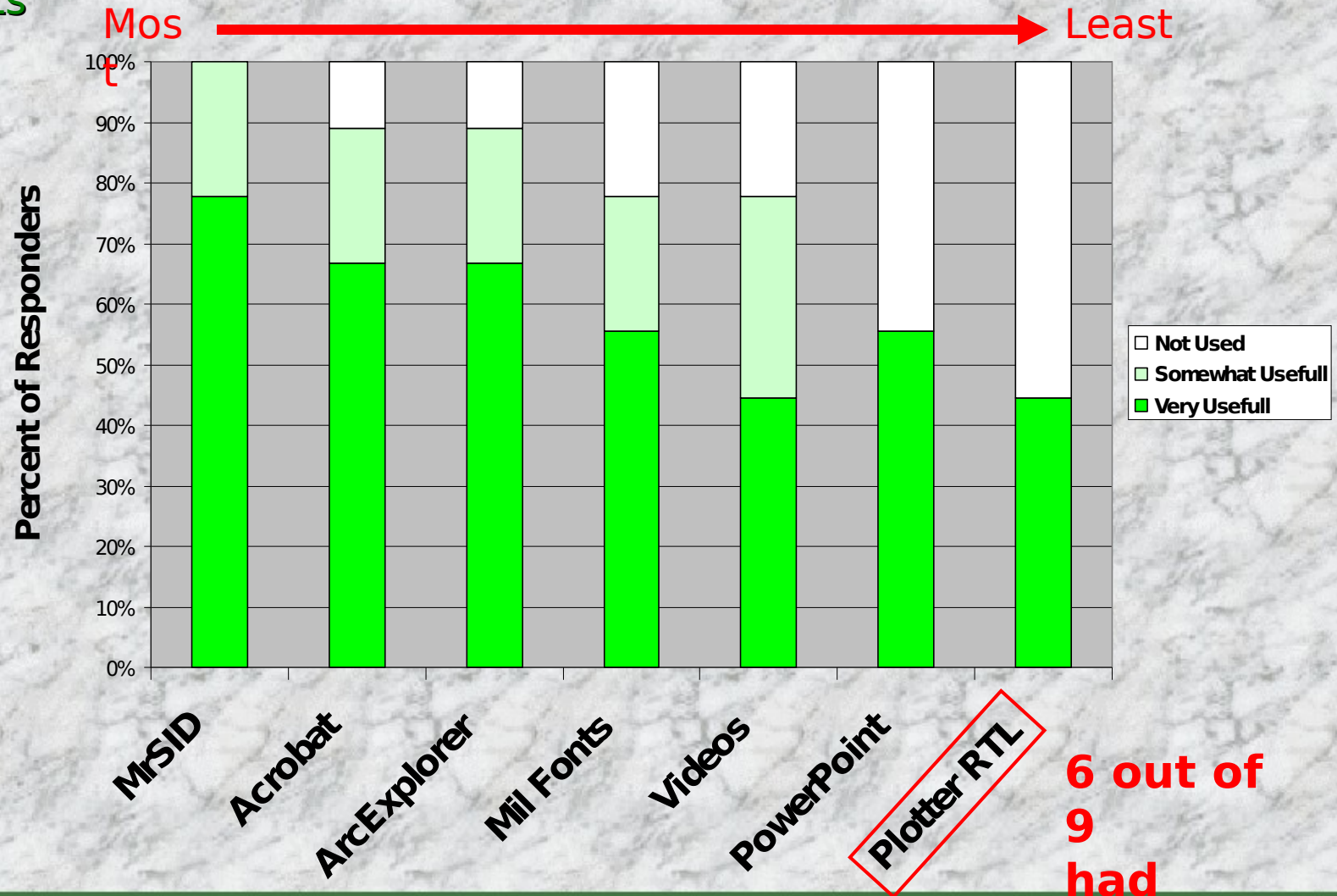


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User Survey Results

Usefulness By CD Product (For Those Who Used The CD - 9 out of 51)



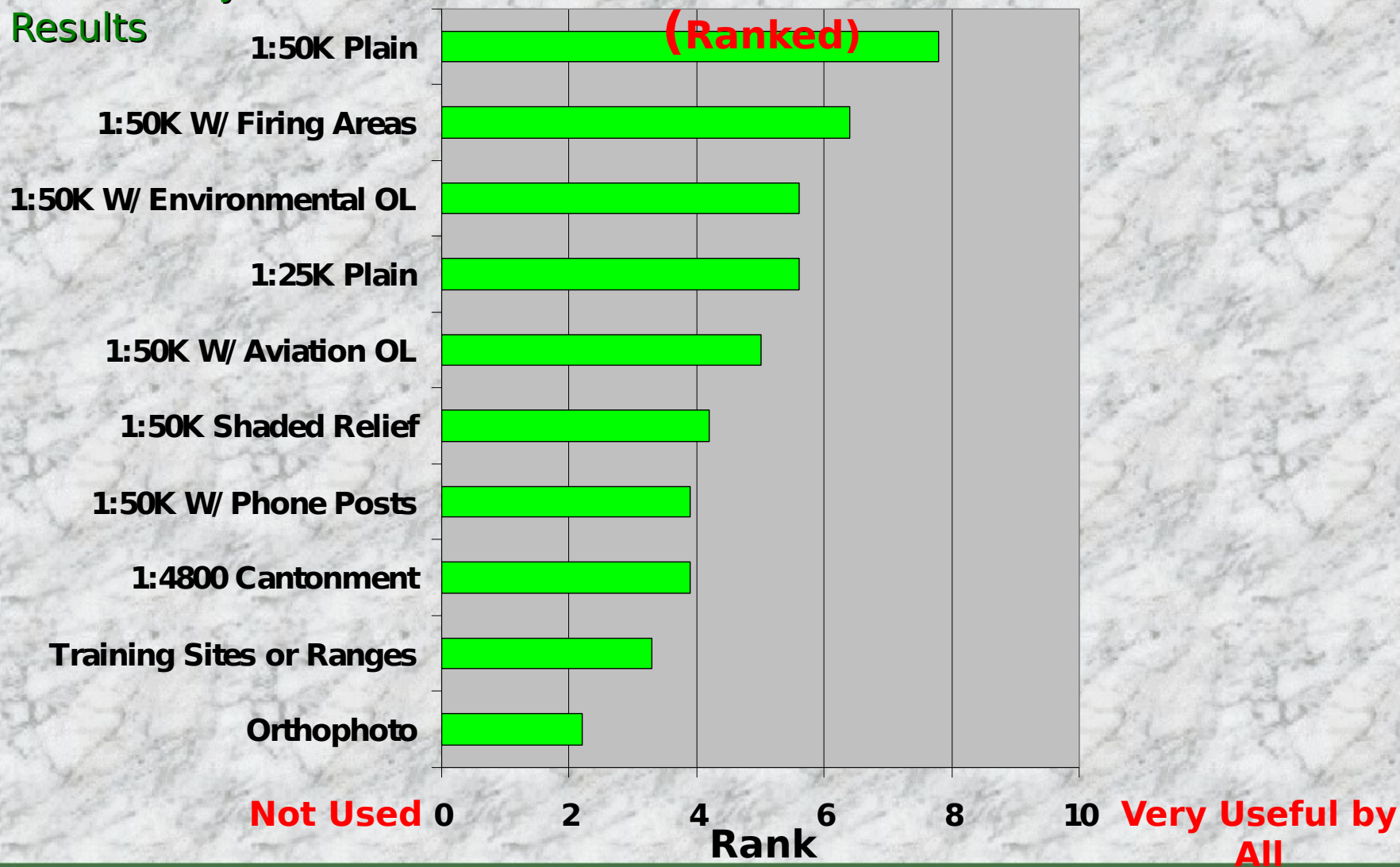


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User Survey Results

Map Usefulness





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User Survey Results

*** Updated CD Interest - 100%**

*** When Needed?**

Oct Nov Dec Jan Feb Mar Apr



F O R T M C C O Y



User Survey Results

*** Updated CD Interest - 100%**

*** When Needed?**

Oct Nov Dec Jan Feb Mar Apr



F O R T M C C O Y



Future

- Keep going in the near term



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Future

- Keep going in the near term

- **Expand Map Content**

More Ranges and Training Sites



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Future

- Keep going in the near term

- Expand Map Content

- **Add Logistics Content**

- **Range Regs (350-1 and 350-2)**

- **Range Request Forms**



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Future

- Keep going in the near term
- Expand Map Content
- Add Logistics Content ?
- **Add Multi-media Content ?**



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Future

- Keep going in the near term
- Expand Map Content
- Add Logistics Content ?
- Add Multi-media Content ?
- **Evaluate ArcReader Format**



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Future

- Keep going in the near term

- Expand Map Content

- Add Logistics Content ?

- Add Multi-media Content ?

- Evaluate ArcReader Format

- CD Issues



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Catalogue Demonstration

- GISMccoy
- Imagery
- Maps
- Mil_Symbol_Fonts
- Programs
- Video
- z misc
- _Catalog.htm**
- Canton.aep
- FtMcCoy.aep



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Contact:

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ATTN: AFRC-FM-TMR-I (David Aslesen, GIS Analyst)

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